

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 10/743,644 | 12/22/2003 | Luis Ricardo Rodriguez | 0110-0001 | 7271 |

33787 7590 10/22/2004

JOHN J. OSKOREP, ESQ.
ONE MAGNIFICENT MILE CENTER
980 N. MICHIGAN AVE.
SUITE 1400
CHICAGO, IL 60611

EXAMINER

SINGH, RAMNANDAN P

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2644

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,644

Applicant(s)

RODRIGUEZ, LUIS RICARDO

Examiner

Ramnandan Singh

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Dec. 22, 2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed on July 2, 2004.

Double Patenting

2. ANALYSIS:

To demonstrate that the co-pending Application No. 10/848,434 and the instant Application No. 10/743,644 are claiming common subject matter, a brief comparative analysis is sketched out below:

| Instant Appl. No. 10/743,644 | Co-pending Appl. No. 10/848, 434 |
|---|--|
| Claim 1: A cordless telephone-to-sound card interface adapter for providing mobility to an end user during voice communications over the Internet, comprising: a housing unit; a hybrid transformer circuit carried in the housing unit; the hybrid transformer circuit including: a first hybrid transformer; | Claim 1: A cordless telephone-to-sound card interface adapter for providing mobility to an end user during voice communications over the Internet, comprising: a housing unit; a hybrid transformer circuit carried in the housing unit; the hybrid transformer circuit including a first hybrid transformer; |

a second hybrid transformer coupled to the first hybrid transformer;
an impedance matching circuit coupled to the first and the second hybrid transformers;
a telephone jack coupled to the hybrid transformer circuit for coupling to a cordless telephone system using a telephone cord;
a speaker plug coupled to the hybrid transformer circuit which extends from the housing unit and is configured to connect with a speaker jack of a computer sound card ; and
a microphone plug coupled to the hybrid transformer circuit which extends from the housing unit and is configured to connect with a microphone jack of computer sound card.

a second hybrid transformer coupled to the first hybrid transformer;
an impedance matching circuit coupled to the first and the second hybrid transformers;
a telephone jack coupled to the first and the second hybrid transformers and being configured to connect to a cordless telephone system using a telephone cord;
a speaker plug coupled to the first hybrid transformer and being configured to connect to a speaker jack of a computer sound card ; and
a microphone plug coupled to the second transformer and being configured to connect to a microphone jack of computer sound card.

From the comparison of the above claims , it is clear that claim 1 of the instant application is a broad version of claim 1 of the co-ending application. This is because

Art Unit: 2644

claim 1 of the co-pending application includes all the limitations of claim 1 of the instant application. Thus, the co-pending application and the instant application are claiming common subject matter.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. This is a provisional obviousness-type double patenting rejection.

Claims 1-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/848434. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the co-pending application is an obvious variation of claim of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 11, 12-14, 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Papadopoulos [US 6,731,751 B1].

Regarding claim 1, Papadopoulos teaches a cordless telephone-to-sound interface adapter (i.e. **apparatus 101**) for providing mobility to an end user during voice communications over the Internet, as shown in Fig. 1, the adapter comprising:

a housing unit (**101**);

a hybrid transformer circuit (**209**) carried in the housing unit (**101**) shown in Fig. 2;

the hybrid transformer circuit comprising two transformers:

a first hybrid transformer;

a second hybrid transformer coupled to the first hybrid transformer (not shown) [col. 4, lines 1-10];

Art Unit: 2644

an impedance matching circuit (i.e. **a resistor-capacitor balancing network**) coupled to the first and the second transformers (not shown) [col. 4, lines 1-5];

a telephone RJ-11 jack (**201**) coupled to the hybrid transformer circuit (**209**) for coupling to a cordless telephone system (i.e. **cordless phone base 102 shown in Fig. 1**) using a telephone cord;

a speaker plug (**101**) [col. 1, lines 23-35]; coupled to the hybrid transformer circuit (**209**) which extends from the housing unit (**101**) and is configured to connect with a speaker jack (near **203**) of the computer sound card shown in Fig. 2;

a microphone plug coupled to the hybrid transformer circuit (**209**) which extends from the housing unit (**101**) and is configured to connect with a microphone jack (near **202**) of computer sound card shown in Fig. 2 [Abstract; col. 1, line 66 to col. 2, line 14; col. 2, lines 38-67; claim 1].

Claim 12 is essentially similar to claim 1 and is rejected for the reasons as stated above.

Regarding claim 2, Papadopoulos further teaches the interface adapter (**101**) wherein the hybrid transformer circuit (**209**) consists of passive components [col. 4, lines 1-5].

Regarding claim 3, Papadopoulos further teaches the interface adapter (**101**) wherein the hybrid transformer circuit matches (i.e. **presents a telephone line**

Art Unit: 2644

impedance such as 600 Ω) the cordless telephone system and the computer sound card for inherently canceling a voice echo reflected from **the** hybrid circuit [col. 4, lines 1-5].

Claim 13 is essentially similar to claim 3 and is rejected for the reasons as stated above.

Regarding claims 14, 16, the limitations are shown above.

Regarding claim 11, Papadopoulos further teaches the interface adapter **(101)** comprising:

a Universal Serial Bus (USB) **(660)** interface , as shown in Fig. 6, for supplying a bias voltage to the cordless telephone system through the interface adaptor **(101)** [Fig. 6; col. 4, lines 50-65].

Claim 17 is essentially similar to claim 11 and is rejected for the reasons as stated above apropos of claim 11.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2644

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-10, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos as applied to claims 1, 14 above, and further in view of Bigelow [Editor; "Understanding Telephone Electronics", 3rd Edition, 1997, Pub. Butterworth-Heinemann; pp. 68-72].

Regarding claim 6, Papadopoulos further teaches the interface adapter (101) wherein the hybrid transformer circuit (209) consists of two transformers [col. 4, lines 1-2]. Further, Papadopoulos refers to Bigelow, page 69, for more details about the components and configurations of these transformers wherein Bigelow teaches a hybrid transformer circuit comprising two transformers shown in Fig. 2-13 [Page 69].

Although Bigelow shows a hybrid transformer circuit comprising two transformers having eight coils coupled to an impedance matching circuit (i.e. **balancing network**) in Fig. 2-13, page 69, without labeling these eight coils as A, B, C, D, E, F, G and H for describing various connections among these coils to generate a desired configuration of the hybrid transformer circuit as claimed in claim 6, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use any configuration for the hybrid circuit in order to accommodate the performance specification of the interface adapter (101) of Papadopoulos subject to circuit, system and design constraints.

A similar thing holds for claims 7-10. 15.

9. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos as applied to claim 1 above.

Regarding claim 4, although Papadopoulos does not disclose specific values of the miniplugs used for the speaker and the microphone plugs, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use any sizes of the miniplugs for the speaker and the microphone plugs in order to accommodate the performance specification of the interface adapter (101) of Papadopoulos subject to circuit, system and design constraints.

Regarding claim 5, although Papadopoulos teaches matching an example of $600\ \Omega$ for a telephone line impedance by the balancing network [col. 4, lines 1-5]; it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use any value of the matching impedance to be generated by the balancing network in order to accommodate the performance specification of the interface adapter (101) of Papadopoulos subject to circuit, system and design constraints.

10. Claims 18-20, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos [US 6,731,751 B1] in view of Bigelow [Editor; "Understanding Telephone Electronics", 3rd Edition, 1997, Pub. Butterworth-Heinemann; pp. 68-72].

Regarding claim 18, Papadopoulos teaches the interface adapter **(101)** wherein the hybrid transformer circuit **(209)** consists of two transformers [col. 4, lines 1-2]. Further, Papadopoulos refers to Bigelow , page 69, for more details about the components and configurations of these transformers wherein Bigelow teaches a hybrid transformer circuit comprising two transformers shown in Fig. 2-13 [Page 69].

Although Bigelow shows a hybrid transformer circuit comprising two transformers having eight coils coupled to an impedance matching circuit (i.e. **balancing network**) in Fig. 2-13, page 69, without labeling these eight coils as A, B, C, D, E, F, G and H for describing various connections among these coils to generate a desired configuration of the hybrid transformer circuit as claimed in claim 18, it would have been obvious to one of ordinary skill in the art , at the time the invention was made, to use any configuration for the hybrid circuit in order to accommodate the performance specification of the interface adapter **(101)** of Papadopoulos subject to circuit, system and design constraints.

Claim 25 is essentially similar to claim 18 and is rejected for the reasons stated above.

Regarding claim 19, Bigelow teaches the hybrid transformer circuit, as shown in Fig. 2-16, comprising passive components such as resistors, inductors and capacitors .

Regarding claim 20, Papadopoulos further teaches the interface adapter (101) wherein the hybrid transformer circuit matches (i.e. **presents a telephone line impedance such as 600 Ω**) the cordless telephone system and the computer sound card for inherently canceling a voice echo reflected from the hybrid circuit [col. 4, lines 1-5].

Regarding claim 24, Papadopoulos further teaches the interface adapter (101) comprising:

a Universal Serial Bus (USB) (660) interface , as shown in Fig. 6, for supplying a bias voltage to the cordless telephone system through the interface adaptor (101) [Fig. 6; col. 4, lines 50-65].

11. Claims 21-23 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Papadopoulos and Bigelow as applied to claim 18 above.

Regarding claim 21, although Papadopoulos teaches an example of matching **600 Ω** for a telephone line impedance by the balancing network [col. 4, lines 1-5]; it would have been obvious to one of ordinary skill in the art , at the time the invention was made, to use any value of the matching impedance to be generated by the balancing network in order to accommodate the performance specification of the interface adapter (101) of Papadopoulos subject to circuit, system and design constraints.

A similar thing holds for claims 22 and 23.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) McElvancey [US 20020001610 A1] teaches a cordless handset system connected a PC for making calls over the Internet [Figs. 1-8];

(ii) Shaharaban et al [US 20010012285 A1] teaches an internet telephone interface system [Figs. 1-14; Abstract];

(iii) Visser [US 6,577,219 B2] teaches a transformer for cellular phone including multiple coil segments [Figs. 1-3; Abstract]; and

(iv) Kennedy et al [US 20030032393 A1] teach a device for attaching a personal computer to a telephone [Figs. 1-3; Abstract].


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (703)308-6270. The examiner can normally be reached on M-F(8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester Isen can be reached on (703)-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh
Examiner
Art Unit 2644



FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER